114. The rearview system of claim 113 wherein said wide angle view comprises an area at the back of the vehicle.

115. The rearview system of claim 112 wherein said wide angle optical system comprises non-symmetrical optics.

116. The rearview system of claim 112 wherein the output of said image capture device is corrected for distortion in the image captured by said wide angle optical system.

117. The rearview system of claim 116 wherein said correction of said distortion is achieved electronically.

118. The rearview system of claim 112 wherein said rearview vision system includes a distance-measuring system.

119. The rearview system of claim 118 wherein said distance-measuring system is selected from the group consisting of a radar, an ultrasonic sensing, and an infrared detection distance-measuring system.

120. The rearview system of claim 112 wherein said image capture device has a field of view which is symmetrical about the longitudinal axis of the vehicle.

121. The rearview system of claim 112 wherein said image capture device comprises a pixelated imaging array.

122. The rearview system of claim 121 wherein said pixelated array comprises a CMOS imaging array.

123. The rearview system of claim 112 wherein said display system comprises one of a flat panel display and a cathode ray tube.

74 65 115

124. The rearview system of claim ~~112~~ wherein said display system comprises a flat panel display.

75 74 ~~75~~

125. The rearview system of claim ~~124~~ wherein said flat panel display comprises one of a liquid crystal display, a plasma display and a field emission display.

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126. The rearview system of claim ~~125~~ wherein said flat panel display comprises a liquid crystal display.

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127. The rearview system of claim ~~112~~ wherein said display system is positioned within the field of view of the driver without obstructing the view through the windshield.

78 65 115

128. The rearview system of claim ~~112~~ wherein said display system is mounted to one of the dashboard, facia, header and windshield of the vehicle.

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129. The rearview system of claim ~~112~~ wherein said display system is mounted at a position conventionally occupied by an interior rearview mirror.

80 65 115

130. The rearview system of claim ~~112~~ wherein said display system comprises display of one of a projected and a virtual image.

81 65 115

131. The rearview system of claim ~~112~~ wherein said display system comprises a heads-up display.

82

132. A rearview vision system for a vehicle having a gear actuator, comprising:

an image capture device mounted at the rear of the vehicle and having a field of view directed rearwards of the vehicle;

a display system viewable by a driver of the vehicle;

said image capture device utilizing a wide angle optical system comprising non-symmetrical optics in order to provide a wide angle view of an area rearwards of the vehicle; and

wherein said display system displays a rearward image output of said image capture device when the gear actuator of the vehicle selects a reverse gear to operate the vehicle in reverse.

83 82
133. The rearview system of claim 132 wherein said wide angle view comprises a view at a lower portion of said rearwards directed field of view of said image capture device.

84 83
134. The rearview system of claim 133 wherein said wide angle view comprises an area at the back of the vehicle.

Cl Cont 85 82
135. The rearview system of claim 132 wherein said display of said rearward image output of said image capture device is disabled when the vehicle's gear actuator is not in reverse gear.

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136. The rearview system of claim 132 wherein the output of said image capture device is corrected for distortion in the image captured by said wide angle optical system.

87 86
137. The rearview system of claim 136 wherein said correction of said distortion is achieved electronically.

88 82
138. The rearview system of claim 132 wherein said rearview vision system includes a distance-measuring system.

89 88
139. The rearview system of claim 138 wherein said distance-measuring system is selected from the group consisting of a radar, an ultrasonic sensing, and an infrared detection distance-measuring system.

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140. The rearview system of claim 132 wherein said image capture device has a field of view which is symmetrical about the longitudinal axis of the vehicle.

91 82
141. The rearview system of claim 132 wherein said image capture device comprises a pixelated imaging array.

92 91

142. The rearview system of claim 141 wherein said pixelated array comprises a CMOS imaging array.

93 82

143. The rearview system of claim 132 wherein said display system comprises one of a flat panel display and a cathode ray tube.

94 82

144. The rearview system of claim 132 wherein said display system comprises a flat panel display.

95 94

145. The rearview system of claim 144 wherein said flat panel display comprises one of a liquid crystal display, a plasma display and a field emission display.

96 95

146. The rearview system of claim 145 wherein said flat panel display comprises a liquid crystal display.

97 82

147. The rearview system of claim 132 wherein said display system is positioned within the field of view of the driver without obstructing the view through the windshield.

98 82

148. The rearview system of claim 132 wherein said display system is mounted to one of the dashboard, facia, header and windshield of the vehicle.

99 82

149. The rearview system of claim 132 wherein said display system is mounted at a position conventionally occupied by an interior rearview mirror.

100 82

150. The rearview system of claim 132 wherein said display system comprises display of one of a projected and a virtual image.

101 82

151. The rearview system of claim 132 wherein said display system comprises a heads-up display.